I notice… I wonder…

Think about your experiences with students as they work with fraction concepts – wherever and however they come up in the Gr. 7-12 mathematics curriculum. Think about watching them, listening to them, talking to them, and reviewing their work. What have you noticed? What do you wonder? Take a few minutes to jot down some thoughts below.

The following is a summary of thoughts shared from the Gr. 9-12 breakout group.

I notice…

* that many students dislike fractions strongly, e.g. “I don’t do fractions!”
* that many students have trouble extending beyond circles
* that many students do not seem to be able to make connections between representations
* that manipulatives do not seem to be used very much in secondary grades
* that students have problems with concepts like lowest common denominator and how that relates to equivalent fractions
* that students who struggle with basic multiplying and dividing, have even more difficulties with fractions

I wonder…

* What do students actually see when they are trying to solving a fraction problem?
* How can we help them to make their thinking visible?
* Is there a stigma attached to using manipulatives? Should there be?
* How do we get students to consolidate their learning about fractions and help them make new connections?
* Do students understand the different meanings of fractions, e.g. part-to-part, part-to-whole?
* How do we move beyond memorizing the procedures?